



**CH2MHILL**

**CH2M HILL**  
727 North First Street  
Suite 400  
St. Louis, MO 63102-2542  
**Tel 314.421.0900**

May 29, 2007

Christine Kump-Mitchell, P.E.  
Environmental Engineer  
Missouri Department of Natural Resources  
St. Louis Regional Office  
7545 S. Lindbergh, Suite 210  
St. Louis, MO 63126-4839

Subject: Documentation of Floor Removal during 1997 Building Renovation at Modine  
Manufacturing Company, Camdenton, Missouri

Dear Ms. Kump-Mitchell:

Pursuant to your letter request dated March 30, 2007 to Mr. Tom Sanicola, CH2M HILL is submitting, on behalf of Modine Manufacturing Company (Modine), documentation evidencing the partial removal of the manufacturing floor at Modine's Camdenton Missouri Facility. Supporting documentation attached to this letter includes the following:

- An information sheet prepared by Mr. Sanicola that summarizes the surface area of concrete removed, the volume of concrete removed, and the identification of sample points collected from each area of removal;
- A figure illustrating the location of the removal areas and the sampling points; and
- Eight photographs (screen captures from video tape) that show the floor being removed.

Modine believes that the supporting documentation provided adequately supports Modine's position that additional investigation under the building is not necessary.

476622



RCRA BARCODE

**RCAP RECEIVED**

**MAY 30 2007**

Christine Kump-Mitchell  
Missouri Department of Natural Resources  
Page 2  
May 29, 2007

If you or your colleagues have additional questions with regard to the attached documentation please call me at (314) 335-3037 or Mr. Gary Fahl with Modine at (262) 636-1223.

Sincerely,

CH2M HILL



Daniel J. Price, R.G.  
Project Manager

stl\Documentation Response Letter.doc

c: Gary Fahl - Modine Manufacturing Company  
Bob King - Modine Manufacturing Company  
Steven Poplawski - Bryan Cave LLP  
David Garrett - EPA Region VII  
Rick Nussbaum - Missouri Department of Natural Resources

Under the Building Information for  
Modine Manufacturing Company  
Camdenton, MO

The following is a summary of the exposed area calculations and the calculated concrete disposal amounts for the floor excavation at the Modine Manufacturing Company Camdenton, MO site. This calculation includes installed equipment, drain line installation, press pit installation and new rest rooms.

The following assumptions are made:

For drain line installation/reconstruction, assume a 4 foot wide trench  
All concrete removed is assumed to be 6 inches in depth.

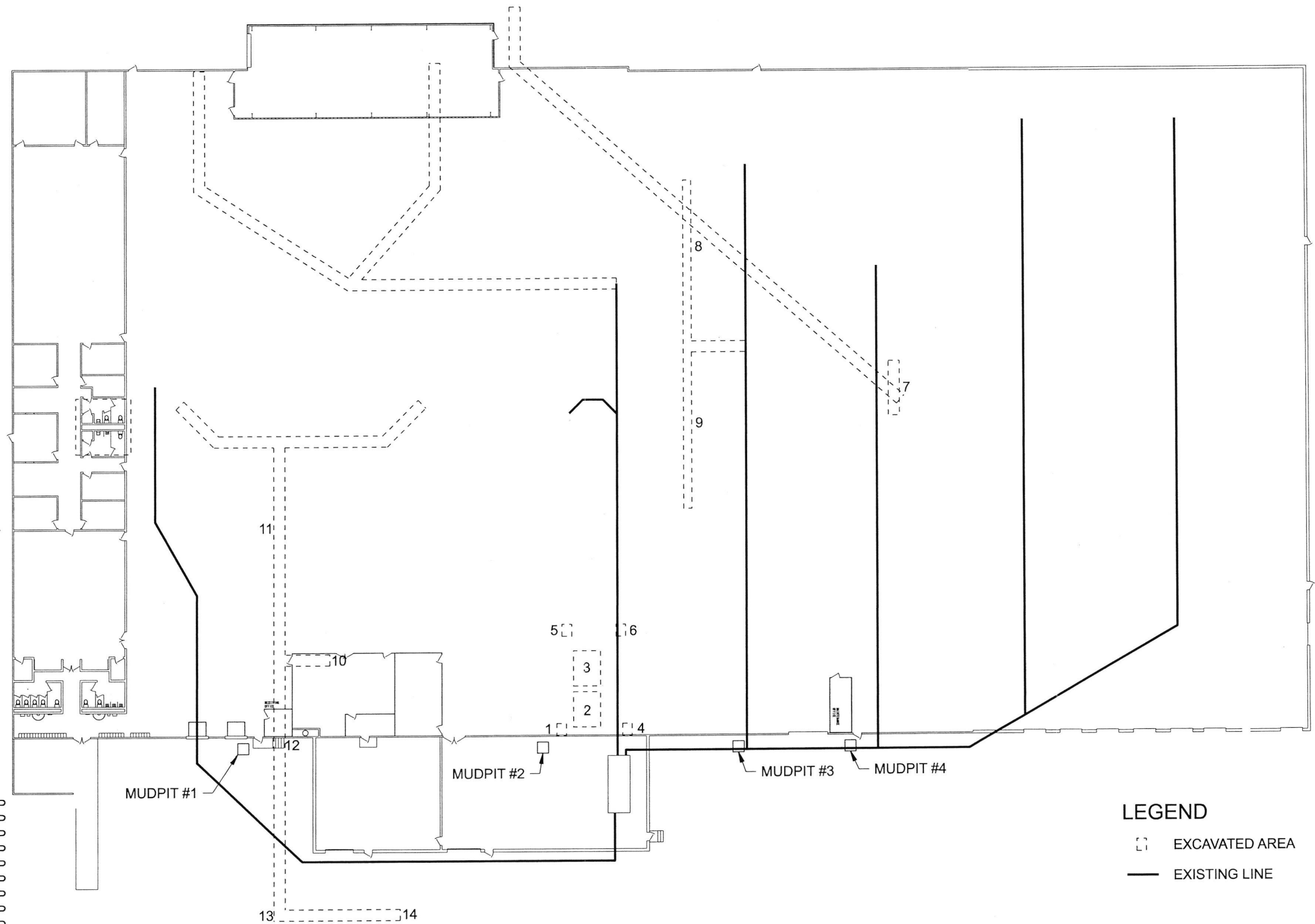
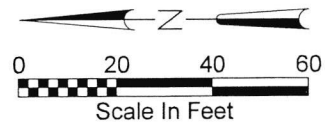
Sampling Points	Area Name	Concrete Area Calculation	Concrete Area Removal Calculation
1, 2, 3, 4, 5, 6	New Press Pits	20 ft x 12 ft = 240 ft <sup>2</sup> 240 ft <sup>2</sup> x 2 pits = 480 ft <sup>2</sup>	20 ft x 12 ft x 0.5 ft = 4.5 yds <sup>3</sup> 120 ft <sup>3</sup> x 2 pits = 9 yds <sup>3</sup>
7	New Plant Rest Room Area	40 ft x 6 ft = 240 ft <sup>2</sup> for rest room area 187 ft x 4 ft = 748 ft <sup>2</sup> for sanitary sewer line	40 ft x 6 ft x 0.5 ft = 4.5 yds <sup>3</sup> for rest room area 187 ft x 4 ft x 0.5 ft = 14 yds <sup>3</sup> for sanitary sewer line
8, 9	Testing Area	144 ft x 4 ft = 576 ft <sup>2</sup>	144 ft x 4 ft x 0.5 ft = 11 yds <sup>3</sup>
10	Quality Jib Crane Base	5 ft x 5 ft = 25 ft <sup>2</sup>	5 ft x 5 ft x 0.5 ft = 0.5 yds <sup>3</sup>
11, 12, 13, 14	New Storm Water Drain	235 ft x 4 ft = 940 ft <sup>2</sup>	158 ft x 4 ft x 0.5 ft = 18 yds <sup>3</sup>
None	New Braze Oven Area	300 ft x 4 ft = 1,200 ft <sup>2</sup>	300 ft x 4 ft x 0.5 ft = 22 yds <sup>3</sup>
None	New Office Rest Rooms	20 ft x 20 ft = 400 ft <sup>2</sup>	20 ft x 20 ft x 0.5 ft = 8 yds <sup>3</sup>
Totals		4,609 ft <sup>2</sup>	87 yds <sup>3</sup>

Area Calculation: length of excavation x width = Total area uncovered in ft<sup>2</sup>

Concrete Removal Calculation: length x width x depth x 1 yds<sup>3</sup>/27 ft<sup>3</sup> = Total volume removed in yds<sup>3</sup>

Samples 12, 13 and 14 were taken outside the plant floor area and are not included in the floor area calculations.

Soil sampling points were tested for TCLP organics to confirm that the removed soil was non-hazardous and able to be disposed of as a non-hazardous waste.



#### SAMPE LOCATIONS AND DEPTH

1	CUPOLA FOOTING	4' DEEP
2	PRESS FOUNDATION	5' DEEP
3	PRESS FOUNDATION	5' DEEP
4	CUPOLA FOOTING	4' DEEP
5	CUPOLA FOOTING	2' DEEP
6	CUPOLA FOOTING	3' DEEP
7	RESTROOM PLUMBING	1' DEEP
8	TRENCH DRAIN	3' DEEP
9	TRENCH DRAIN	3' DEEP
10	JIB CRANE FOUNDATION	4' DEEP
11	STROM DRAIN	3' DEEP
12	STORM DRAIN	2' DEEP
13	STORM DRAIN	3' DEEP
14	STORM DRAIN	4' DEEP

#### LEGEND

- EXCAVATED AREA
- EXISTING LINE

BUILDING RENOVATION  
CONCRETE REMOVAL AREAS AND SAMPLE LOCATIONS  
MODINE MANUFACTURING COMPANY  
CAMDENTON, MISSOURI  
**CH2MHILL**



Photo documentation of Floor Removal  
Modine Manufacturing Company  
Camdenton, Missouri





Photo documentation of Floor Removal  
Modine Manufacturing Company  
Camdenton, Missouri

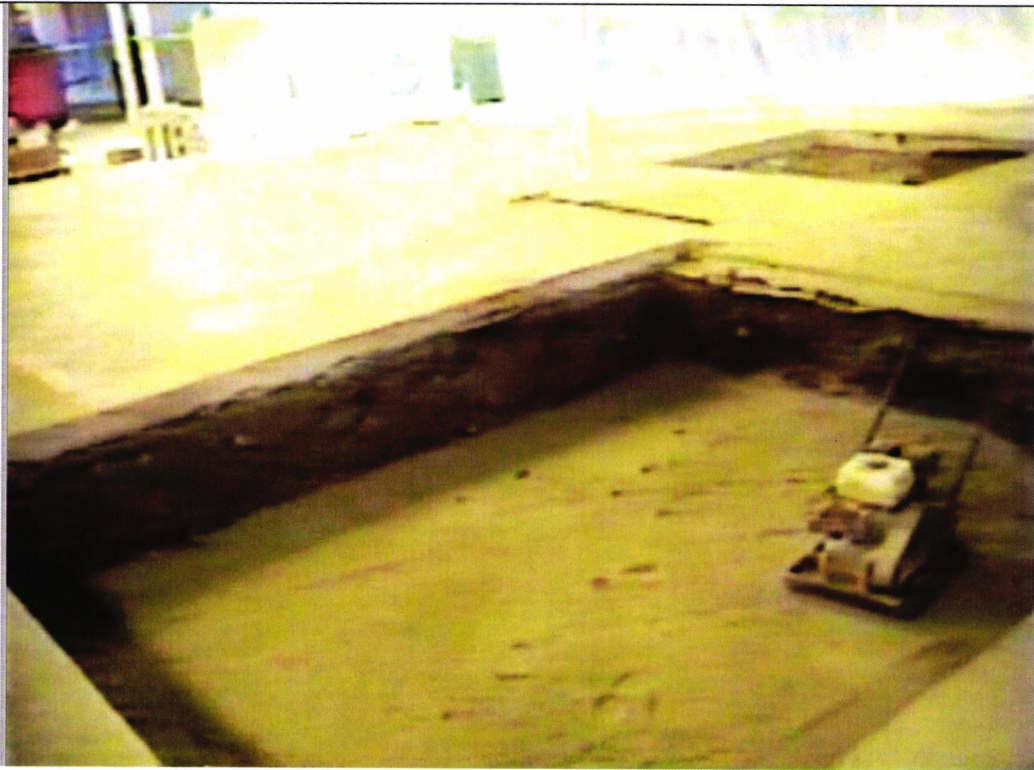




Photo documentation of Floor Removal  
Modine Manufacturing Company  
Camdenton, Missouri

---





Photo documentation of Floor Removal  
Modine Manufacturing Company  
Camdenton, Missouri

